

## **CLAIMS**

### **What is claimed is:**

1. A method of dynamically assigning a plurality of voice ports and arranging a plurality of menu choice prompting sequences for at least one application, comprising the steps of:

receiving a plurality of incoming calls;

monitoring at least one among a recognition error rate for each menu option and execution path, a success rate for completing a desired transaction and an associated origination number, and frequently used menu options; and

in response to the monitoring step, rearranging at least one of the menu choice prompting sequences among the plurality of menu choice prompting sequences and re-assigning at least one voice port among the plurality of voice ports.

2. The method of claim 1, wherein the step of monitoring the recognition error rate for each menu option and execution path is done while calculating the impact of the recognition error rate on a call duration.

3. The method of claim 1, wherein the step of monitoring the success rate comprises the step of monitoring callers that stay on the application and complete the desired transaction, monitoring revenue from a given caller, and monitoring duration of a transaction from the given caller or the associated origination number.

4. The method of claim 1, wherein the step of rearranging menu choice prompting sequences comprises the step of rearranging menu choice prompting sequences in real-time based on the recognition error rate and the frequently used menu options.

5. The method of claim 1, wherein the step of re-assigning voice ports comprises the step of providing greater priority to at least one of the plurality of voice ports based on the success rate

6. The method of claim 1, wherein the method dynamically assigns the plurality of voice ports and arranges the plurality of menu choice prompting sequences for an interactive voice response system having a plurality of applications.

7. The method of claim 6, wherein the method further comprises the step of assigning greater priority to voice ports using an application with a greater speech recognition success rate than other applications among the plurality of applications on the interactive voice response system.

8. An interactive voice response system, comprising:  
a plurality of voice ports; and  
a processor coupled to the voice ports in the interactive voice response system, the processor programmed to:

receive a plurality of incoming calls;

monitor at least one among a recognition error rate for each menu option and execution path, a success rate for completing a desired transaction and an associated origination number, and frequently used menu options;

rearrange at least one of the menu choice prompting sequences among the plurality of menu choice prompting sequences in response to monitoring at least one among the recognition error rate and the frequently used menu options; and

re-assign at least one voice port among the plurality of voice ports in response to monitoring the success rate.

9. The system of claim 8, wherein the processors monitors the recognition error rate for each menu option and execution path while calculating the impact of the recognition error rate on a call duration.

10. The system of claim 8, wherein the processor monitors callers that stay on the system and complete the desired transaction, monitors revenue from a given caller, and

monitors duration of a transaction from the given caller or the associated origination number.

11. The system of claim 8, wherein the processor rearranges menu choice prompting sequences by rearranging menu choice prompting sequences in real-time based on the recognition error rate and the frequently used menu options.

12. The system of claim 8, wherein the processor re-assigns voice ports by providing greater priority to at least one of the plurality of voice ports based on the success rate

13. The system of claim 8, wherein the processor dynamically assigns the plurality of voice ports and arranges the plurality of menu choice prompting sequences for an interactive voice response system having a plurality of applications.

14. The system of claim 13, wherein the processor further assigns greater priority to voice ports using an application with a greater speech recognition success rate than other applications among the plurality of applications on the interactive voice response system.

15. A machine-readable storage, having stored thereon a computer program having a plurality of code sections executable by a machine for causing the machine to perform the steps of:

receiving a plurality of incoming calls;

monitoring at least one among a recognition error rate for each menu option and execution path, a success rate for completing a desired transaction and an associated origination number, and frequently used menu options;

rearranging at least one of the menu choice prompting sequences among the plurality of menu choice prompting sequences in response to monitoring at least one among the recognition error rate and the frequently used menu options; and

re-assigning at least one voice port among the plurality of voice ports in response to monitoring the success rate.

16. The machine readable storage of claim 15, wherein the computer program further monitors callers that stay on the system and complete the desired transaction, monitors revenue from a given caller, and monitors duration of a transaction from the given caller or the associated origination number.

17. The machine readable storage of claim 15, wherein the computer program rearranges menu choice prompting sequences by rearranging menu choice prompting sequences in real-time based on the recognition error rate and the frequently used menu options.

18. The machine readable storage of claim 15, wherein the computer program re-assigns voice ports by providing greater priority to at least one of the plurality of voice ports based on the success rate

19. The machine readable storage of claim 15, wherein the computer program dynamically assigns the plurality of voice ports and arranges the plurality of menu choice prompting sequences for an interactive voice response system having a plurality of applications.

20. The system of claim 19, wherein the computer program further assigns greater priority to voice ports using an application with a greater speech recognition success rate than other applications among the plurality of applications on the interactive voice response system.